

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore:

In claim 1, the refrigerating unit, evaporator, stirrer;

In claim 3, the pumps being “volumetric pumps”;

In claim 4, the pumps being peristaltic pumps;

In claim 5, the liquid and or syrups supplied pneumatically from the tanks;

In claim 6, the piston of the cylinder;

In claims 8 and 16-20, the selector, control unit, the “double-acting cylinder”, the associated control unit interconnections with those devices;

In claim 9, the plurality of buttons and associated functions;

In claims 10-15, the operational steps as recited;

must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the

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renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Reference to Claim 1

In line 2, “of the type” is indefinite.

In lines 2-3, “the evaporator” lacks antecedent basis.

In lines 3-4, “the liquid ice cream mixture” lacks antecedent basis.

In lines 2-3, “the front end” lacks antecedent basis.

In line 5, it is unclear if the preamble ends in line 2 with “comprising” or ends in line 5 with “characterized”.

In lines 8-9, the use of the term “containing” within the context of the claim makes it unclear if the diluting liquid and dressing syrups are being positively recited in

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combination with the machine, or if the term “containing” is intended to describe the function of the tanks.

In lines 10-11, “both said apertures”, “said aperture”, “these apertures” have confusing antecedent basis in 6 and 7.

In lines 11-12 and 15, the recited “means for actuating said piston” and “means for performing rotation of said spindle” are considered to invoke 35 U.S.C. 112, sixth paragraph, but have not been explicitly associated with corresponding structure(s) in the specification, it is unclear which particular structure(s) correspond to each of these “means for” or what would or would not be encompassed by equivalents.

In line 13, the term “small” is a relative term which renders the claim indefinite. The term “small” is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

In lines 14-15, “said dispensing nozzle” lacks antecedent basis.

In Reference to Claim 5

The liquids or syrups being supplied “pneumatically” from said tanks is not clearly understood read in light of the specification. On page 5, lines 10-13, the “pneumatically” pressurized tanks are disclosed as an alternate to the pumps which are required in line 8 of claim 1 from which this claim depends.

In Reference to Claim 6

In line 2, “type” is indefinite.

In lines 2-3, “the stem” and “the end” lack antecedent basis.

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In Reference to Claims 8, and 16-20

In line 2, “the motor of the stirrer” lacks antecedent basis.

In line 3, “the motor of the rotor” and “the double-acting cylinder” lack antecedent basis.

In Reference to Claim 9

In lines 4-6, “the syrup” has confusing antecedent basis; reference characters within parenthesis are ignored in reading the claims, consequently the reference characters can not be used to differentiate between the different recitations of the syrup.

The claim is not understood, in particular the phrase “which allow the following options” is confusing; it is unclear if the claim intends to recite a plurality of buttons per se along with their intended use, or if the “options” recited in lines 3-8 are intended to impart a structural limitation to the claimed machine.

In Reference to Claims 10-15

These claims are not understood, in particular the phrase “when dispensing” is confusing; it is unclear if the claim intends to convey only functional recitations, or if the recited operations are intended to impart structural limitations to the claimed machine. The buttons per se would not be capable of performing the recited functions, and the claim appears to be incomplete as failing to recite the necessary control structure to perform the operations.

Claims 10-15 contain contradictory recitations; for example, claim 10 recites that the motors of the pumps are not activated, while claim 11 which depends on claim 10, recites that the pumps are operated.

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Reference characters within parenthesis are ignored in reading the claims, consequently the reference characters can not be used to differentiate between the different recitations of structures having the same name. Terms in the claims, such as syrups, pumps, and motor, have confusing antecedent basis as they rely on the reference characters within the parenthesis for their antecedent basis.

NOTE THE FOLLOWING REJECTIONS BASED ON PRIOR ART HAVE BEEN MADE ON THE CLAIMS AS BEST AS THEY ARE UNDERSTOOD IN VIEW OF THE NUMEROUS 35 USC § 112, ERRORS NOTED ABOVE.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-6, 8, and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,382,090 to Cocchi (Cocchi) in view of US Patent No. 3,297,061 to G. R. Nimee (Nimee).

In Reference to Claim 1

Cocchi teaches:

Combined machine for the production of both plain and syrup-dressed ice cream and shakes (Fig. 1; col. 1, lines 39-50), of the type comprising a refrigerating unit (col. 2,

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line 20), a freezing chamber (1) cooled by the evaporator (col. 2, line 21) of said refrigerating unit and provided internally with a stirrer (beater; col. 2, lines 23-25), and a dispensing hatch (2) which closes the front end of the freezing chamber (1), characterized in that said hatch (2) comprises a cylinder (31) provided with a radial aperture (11, 12) communicating with the freezing chamber (1) and provided downstream of said aperture with a plurality of radial apertures (Figs. 2-3; 62), a tubular piston (4) sliding in this cylinder from a first rest position (Fig. 1) in which it closes off both said apertures (62) and said aperture (11, 12), into a second position (Fig. 2) in which it opens all these apertures; means for actuating said piston (42); a spindle (51) which is supported in a rotatable and axially slidable manner inside the tubular duct of said piston (4) and provided at one end with a small rotor (5) housed inside a flared compartment (10) of the end of said cylinder (31) upstream of said dispensing nozzle (9); and means for performing rotation of said spindle (52).

Cocchi does not explicitly teach, the following which is taught by Nimee:

A tank (13, 14) for the liquid ice cream mixture supplied into a freezing chamber (23) and radial apertures (84) communicating, via pumps (85) arranged in between, with tanks (81) containing respectively a diluting liquid (other flavoring ingredients; col. 6, line 70) and one or more dressing syrups (72).

It would have been obvious to one having ordinary skill in the art at the time of the invention to have incorporated the teachings of Nimee to provide a tank and pumps into the dispensing machine of Cocchi in order to store and deliver the base material to the freezing chamber and to

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deliver the desired amount, as needed, of the constituent syrups and other flavoring ingredients to the mixing chamber as taught by Nimee.

In Reference to Claim 2

The machine of Cocchi as modified by Nimee delivers the constituent materials desired for a particular product, Cocchi is for making and dispensing “ice cream shakes, ice cream slushes or the like frozen confections” (col. 1, lines 5-12), consequently the machine will deliver water or milk when the desired confection includes water or milk as a constituent ingredient.

In Reference to Claims 3-5

The machine of Cocchi as modified by Nimee includes a peristaltic pump or alternatively pneumatic (air) pressure (see Nimee, col. 6, lines 70-75). A volumetric pump is a well known alternative pump arrangement; It would have been obvious to one having ordinary skill in the art at the time of the invention to have also used a volumetric pump as such pumps have the known advantage of delivering a metered amount of material per cycle which provides for an accurate delivery of a desired amount of constituent materials.

In Reference to Claim 6

Cocchi teaches the pneumatic cylinder (42) having a stem (41) which engages by means of a union (L-shaped member; Fig. 1) with an end of the piston (4); a pneumatic cylinder inherently has a piston.

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In Reference to Claims 8 and 16-20

The machine of Cocchi as modified by Nimee includes the pumps, stirrer and rotor motors, and the pneumatic piston. Cocchi is silent with respect to a selector and control unit. Nimee further teaches to provide a ice cream confection unit with a selector and control unit to operate all aspects of the machine including the pumps, stirrer and rotor motors, and the pneumatic piston (see Nimee col. 7, line 1 to col. 8, line 7) in order to make the operation of the machine “fully automatic”. It would have been obvious to one having ordinary skill in the art at the time of the invention to have also applied the selector and control unit teachings of Nimee to the machine of Cocchi in order to make the Cocchi machine fully automatic as taught by Nimee.

6. Claims 7 and 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cocchi and Nimee as applied to claims 1 and 9 above, and further in view of US Patent No. 3,276,633 to R. E. Rahauser (Rahauser).

In Reference to Claim 7

Cocchi as modified by Nimee results in a machine according to claim 1 (see rejection of claim 1 above), but does not provide for the means for actuating the spindle comprises a two-speed motor.

Rahauser teaches in a similar machine to that of Applicant's, Cocchi, and Nimee that by providing a mixer spindle with a variable speed motor, blending of a confection with flavoring can produce a homogeneous product or one having a marbled effect as desired (see col. 8, lines 7-21).

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It would have been obvious to one having ordinary skill in the art at the time of the invention to have incorporated the teaching of Rahauser, to provide a multi speed motor for the spindle of the mixer, into the machine of Cocchi as modified by Nimee because doing so would allow the blending of a confection with flavoring to produce a homogeneous product or one having a marbled effect as desired.

In Reference to Claims 9-15

Cocchi as modified by Nimee results in a machine according to claim 8 (see rejection of claim 8 above), but does not explicitly describe the alternative dispensing of plain ice cream, plain ice cream with a selected syrup, plain ice cream with a plurality of syrups, and a milk shake mixed with a plurality of syrups.

Rahauser teaches in a similar machine to that of Applicant's, Cocchi, and Nimee that by providing a mixer spindle with a variable speed motor, blending of a confection with flavoring can produce a homogeneous product or one having a marbled effect as desired (see col. 8, lines 7-21); the machine can be used for milk shakes either from prepared mixes, or mixtures of suitable flavors of ice cream and milk (col. 3, lines 9-13); as many different flavors of frozen confections may be provided as desired (col. 5, lines 3-19); to facilitate regulation, suitable arrangements of control buttons and knobs are employed on a front panel (col. 8, lines 17-21).

In view of the further teachings of Rahauser, it would have been obvious to one having ordinary skill in the art at the time of the invention to have provided the capability to mix the recited alternative ice cream confections and provide the necessary suitable

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arrangements of buttons, knobs, and control to facilitate regulation to obtain the desired variety of confectionary products as desired as taught further taught by Rahauser.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The remaining prior art listed on the attached Notice of Reference Cited have been included because they all show ice cream confection machines.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KENNETH BOMBERG whose telephone number is (571)272-4922. The examiner can normally be reached on Monday-Thursday and alternative Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P. Shaver can be reached on (571)272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KB

/Kenneth Bomberg/

Primary Examiner, Art Unit 3754